

## Patent Abstracts of Japan

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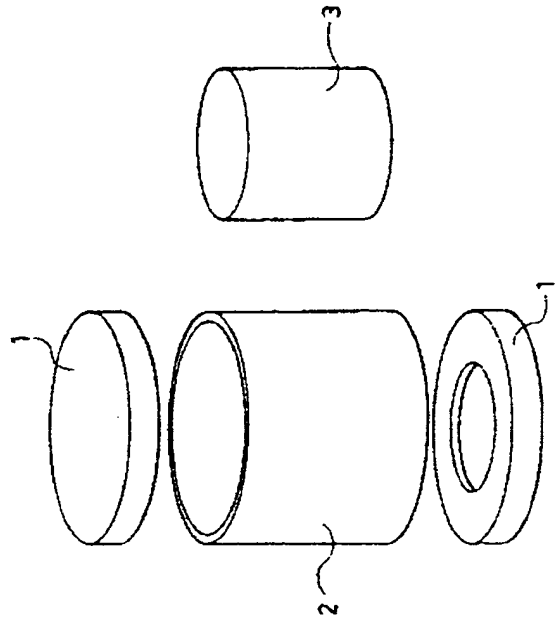
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TITLE : PRODUCTION OF ITO TARGET  
HAVING CYLINDRICAL SHAPE



ABSTRACT : PURPOSE: To produce the ITO target having excellent utilization efficiency at a good raw material yield by preforming the powder of  $\text{In}_2\text{O}_3$  and  $\text{SnO}_2$  to a cylindrical shape, then subjecting the preform to cold isostatic pressing and further to calcining in the production stage of the target to be used at the time of forming the thin film of the ITO as an In-Sn oxide by sputtering.

CONSTITUTION: A slurry prepd. by mixing a small volume of water, binder and dispersant to the powdery  $\text{In}_2\text{O}_3$  and  $\text{SnO}_2$  is packed under pressurization to the space placed between the inside wall of a cylindrical part 2 and core 3 of a casting mold which is made of gypsum or resin and is constituted of the cylindrical part 2 and the core 3 to be put therein as well as upper and lower cap parts 1 in the production stage of the ITO target to be used at the time of forming the thin film of the transparent ITO having an excellent electrical conductivity by sputtering. The slurry is then molded by pressurization. The molding is vacuum sealed into a thin rubber bag and is subjected to the cold isostatic pressing, then to the calcination at a high temp., by which the cylindrical ITO target of a high density having the excellent use efficiency is produced at the good raw material yield.

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